

ATTACHMENT 5

June 2009 - Groundwater Sample Information Sheets

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>146</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>23.12</u>
Depth to product	
Depth to water (DTW)	<u>8.75</u>

Sample Types (circle all applicable)	
<u>Monitoring Well</u>	
<u>Grab</u> Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇐

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>18.0</u>
Bubbles purged from flow cell?	<u>(Y)</u> / N
Is drawdown > 0.3 feet	<u>(Y)</u> / N
Was passive sampling used?	Y / <u>(N)</u>
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>20.08</u>	<u>18.70</u>	<u>18.18</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.869</u>	<u>0.868</u>	<u>0.865</u>				
D.O. (mg/L)	+/- 10%**	<u>6.91</u>	<u>3.23</u>	<u>2.43</u>				
pH	+/- 0.1	<u>7.13</u>	<u>6.99</u>	<u>6.91</u>				
ORP (mV)	+/- 10 mV**	<u>158.3</u>	<u>162.6</u>	<u>164.4</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 14:10 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>160</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>12.81</u>
Depth to product	
Depth to water (DTW)	<u>3.77</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	
Bubbles purged from flow cell?	Y / N
Is drawdown >0.3 feet	Y / N
Was passive sampling used?	Y / N
Flowrate =	mL/min
ID number from controller console	#

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>22.34</u>	<u>23.35</u>	<u>23.69</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.900</u>	<u>0.920</u>	<u>0.925</u>				
D.O. (mg/L)	+/- 10%**	<u>15.24</u>	<u>11.02</u>	<u>10.91</u>				
pH	+/- 0.1	<u>6.83</u>	<u>6.67</u>	<u>6.64</u>				
ORP (mV)	+/- 10 mV**	<u>192.1</u>	<u>194.6</u>	<u>201.4</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 05 gallons

Sample Date: 6/19/09 Sample Time: 12:45 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: buried in sand & overgrowth but OK

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- 153	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	20.76
Depth to product	
Depth to water (DTW)	11.42

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate	Duplicate ID: Dup-02
MS/MSD	
Other	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	15.0
Bubbles purged from flow cell?	(Y) N
Is drawdown >0.3 feet	(Y) N
Was passive sampling used?	Y / (N)
Flowrate =	mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
Performed	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	20.7	19.00	17.86				
Spec. Cond (µmhos)	+/- 3%	0.151	0.750	0.744				
D.O. (mg/L)	+/- 10%**	9.91	9.47	9.71				
pH	+/- 0.1	7.11	7.00	6.93				
ORP (mV)	+/- 10 mV**	173.2	178.8	181.3				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 13:25 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>302</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>37.61</u>
Depth to product	
Depth to water (DTW)	<u>11.89</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>32.0</u>
Bubbles purged from flow cell?	<u>Y</u> / N
Is drawdown >0.3 feet	<u>Y</u> / N
Was passive sampling used?	Y / <u>N</u>
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>19.45</u>	<u>18.51</u>	<u>17.88</u>	<u>17.57</u>			
Spec. Cond (µmhos)	+/- 3%	<u>0.597</u>	<u>0.577</u>	<u>0.569</u>	<u>0.563</u>			
D.O. (mg/L)	+/- 10%**	<u>4.85</u>	<u>6.86</u>	<u>10.15</u>	<u>12.42</u>			
pH	+/- 0.1	<u>7.66</u>	<u>7.57</u>	<u>7.56</u>	<u>7.55</u>			
ORP (mV)	+/- 10 mV**	<u>160.7</u>	<u>162.8</u>	<u>164.2</u>	<u>165.3</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 13:45 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (clear) Slightly Turbid/Turbid/Very Turbid)

Well condition: Good

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>166 S</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>18.97</u>
Depth to product	
Depth to water (DTW)	<u>13.96</u>

Sample Types (circle all applicable)	
<input checked="" type="checkbox"/> Monitoring Well	
<input type="checkbox"/> Grab/Composite	
<input type="checkbox"/> Split Sample	
Duplicate (Duplicate ID: _____)	
<input type="checkbox"/> MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>15.0</u>
Bubbles purged from flow cell?	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N
Is drawdown >0.3 feet	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N
Was passive sampling used?	<input type="checkbox"/> Y / <input checked="" type="checkbox"/> N
Flowrate =	mL/min
ID number from controller console	# <u>139</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
Performed	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>17.16</u>	<u>16.87</u>	<u>16.67</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.948</u>	<u>0.962</u>	<u>0.966</u>				
D.O. (mg/L)	+/- 10%**	<u>7.48</u>	<u>7.19</u>	<u>7.29</u>				
pH	+/- 0.1	<u>7.24</u>	<u>7.18</u>	<u>7.17</u>				
ORP (mV)	+/- 10 mV**	<u>203.6</u>	<u>205.2</u>	<u>205.4</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 11:20 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: Good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>166 D</u>	Well Location:

Monitoring Well Data	
Well Material	<u>(PVC/SS/Teflon)</u>
Inside Diameter, in.	<u>(1 2 4 6)</u>
Stick up or stick down height	
Total depth of well (TD)	<u>44.37</u>
Depth to product	
Depth to water (DTW)	<u>13.75</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	<u>x</u>
1 Well volume = H x CV	<u>=</u> gal
3 Well volumes =	<u>=</u> gal
Purge method (B = bailer, P = pump)	<u>B / P</u>

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>44.0</u>
Bubbles purged from flow cell?	<u>Y</u> / N
Is drawdown >0.3 feet	<u>Y</u> / N
Was passive sampling used?	<u>Y</u> / (N)
Flowrate =	_____ mL/min
ID number from controller console	# <u>139</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>17.61</u>	<u>17.55</u>	<u>17.38</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.828</u>	<u>0.806</u>	<u>0.779</u>				
D.O. (mg/L)	+/- 10%**	<u>10.50</u>	<u>10.96</u>	<u>10.72</u>				
pH	+/- 0.1	<u>7.08</u>	<u>7.10</u>	<u>7.12</u>				
ORP (mV)	+/- 10 mV**	<u>220.0</u>	<u>216.0</u>	<u>212.3</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 11:10 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>1655</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon) <u> </u>
Inside Diameter, in.	(1 2 4 6) <u> </u>
Stick up or stick down height	<u>5.66</u>
Total depth of well (TD)	<u>19.45</u>
Depth to product	<u> </u>
Depth to water (DTW)	<u>13.56</u>

Sample Types (circle all applicable)	
Monitoring Well	<u> </u>
Grab/Composite	<u> </u>
Split Sample	<u> </u>
Duplicate (Duplicate ID: <u> </u>)	
MS/MSD	<u> </u>
Other	<u> </u>

Conventional sampling	
Height of water column (H = TD – DTW)	<u> </u>
Conversion value (CV)*	x <u> </u>
1 Well volume = H x CV	= <u> </u> gal
3 Well volumes =	= <u> </u> gal
Purge method (B = bailer, P = pump)	B / P <u> </u>

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>16.25</u>
Bubbles purged from flow cell?	<u>(Y/N)</u>
Is drawdown >0.3 feet	<u>(Y/N)</u>
Was passive sampling used?	<u>(Y/N)</u>
Flowrate =	<u> </u> mL/min
ID number from controller console	# <u>139/65</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia 1.047

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>10.78</u>	<u>9.60</u>	<u>9.40</u>	<u>9.29</u>	<u>9.33</u>		
Spec. Cond (µmhos)	+/- 3%	<u>0.952</u>	<u>0.661</u>	<u>0.658</u>	<u>0.656</u>	<u>0.657</u>		
D.O. (mg/L)	+/- 10%**	<u>3.94</u>	<u>1.47</u>	<u>1.07</u>	<u>0.86</u>	<u>0.83</u>		
pH	+/- 0.1	<u>7.37</u>	<u>7.23</u>	<u>7.20</u>	<u>7.17</u>	<u>7.16</u>		
ORP (mV)	+/- 10 mV**	<u>68.1</u>	<u>21.7</u>	<u>11.1</u>	<u>2.1</u>	<u>-0.4</u>		
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 11:50 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other:

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain:

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- 165 D	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	46.27
Depth to product	
Depth to water (DTW)	13.32

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	41.0
Bubbles purged from flow cell?	(Y) / N
Is drawdown > 0.3 feet	(Y) / N
Was passive sampling used?	Y (N)
Flowrate =	mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	10.41	10.51	10.35	10.20	10.23		
Spec. Cond (µmhos)	+/- 3%	0.588	0.625	0.660	0.693	0.703		
D.O. (mg/L)	+/- 10%**	4.21	2.64	1.51	0.88	0.77		
pH	+/- 0.1	7.38	7.32	7.29	7.27	7.26		
ORP (mV)	+/- 10 mV**	-52.3	-72.4	-83.4	-90.7	-93.3		
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 12 : 15 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Erk Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>164</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>24.71</u>
Depth to product	
Depth to water (DTW)	<u>17.43</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>19.0</u>
Bubbles purged from flow cell?	Y/N
Is drawdown >0.3 feet	Y/N
Was passive sampling used?	Y (N)
Flowrate =	mL/min
ID number from controller console	<u>#165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>16.74</u>	<u>15.99</u>	<u>16.52</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.859</u>	<u>0.847</u>	<u>0.849</u>				
D.O. (mg/L)	+/- 10%**	<u>3.62</u>	<u>2.71</u>	<u>2.13</u>				
pH	+/- 0.1	<u>7.39</u>	<u>7.27</u>	<u>7.19</u>				
ORP (mV)	+/- 10 mV**	<u>66.8</u>	<u>66.9</u>	<u>66.9</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 13:10 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>173</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>17.51</u>
Depth to product	
Depth to water (DTW)	<u>11.73</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>14.0</u>
Bubbles purged from flow cell?	<u>(Y)</u> N
Is drawdown >0.3 feet	<u>(Y)</u> N
Was passive sampling used?	Y <u>(N)</u>
Flowrate =	mL/min
ID number from controller console #	<u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>17.17</u>	<u>16.48</u>	<u>16.45</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.618</u>	<u>0.602</u>	<u>0.600</u>				
D.O. (mg/L)	+/- 10%**	<u>4.85</u>	<u>4.28</u>	<u>4.05</u>				
pH	+/- 0.1	<u>7.44</u>	<u>7.34</u>	<u>7.31</u>				
ORP (mV)	+/- 10 mV**	<u>71.6</u>	<u>72.9</u>	<u>74.1</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 13:30 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: GP - IW-1	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	14.71
Depth to product	
Depth to water (DTW)	10.44

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	12.0
Bubbles purged from flow cell?	Y/N
Is drawdown >0.3 feet	Y/N
Was passive sampling used?	Y/N
Flowrate =	# mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
Performed	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	17.74	17.37	16.97				
Spec. Cond (µmhos)	+/- 3%	0.630	0.624	0.617				
D.O. (mg/L)	+/- 10%**	1.92	1.83	1.95				
pH	+/- 0.1	7.04	7.00	6.97				
ORP (mV)	+/- 10 mV**	-120.5	-118.4	-116.0				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 13:55 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>163</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>19.29</u>
Depth to product	
Depth to water (DTW)	<u>10.23</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>14.25</u>
Bubbles purged from flow cell?	<u>(Y)</u> N
Is drawdown > 0.3 feet	<u>(Y)</u> N
Was passive sampling used?	<u>(Y)</u> N
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>17.77</u>	<u>17.68</u>	<u>17.23</u>	<u>17.02</u>			
Spec. Cond (µmhos)	+/- 3%	<u>0.600</u>	<u>0.599</u>	<u>0.593</u>	<u>0.590</u>			
D.O. (mg/L)	+/- 10%**	<u>3.04</u>	<u>2.72</u>	<u>2.39</u>	<u>2.26</u>			
pH	+/- 0.1	<u>7.03</u>	<u>7.00</u>	<u>6.96</u>	<u>6.94</u>			
ORP (mV)	+/- 10 mV**	<u>-91.0</u>	<u>-91.9</u>	<u>-92.3</u>	<u>-92.9</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 14:15 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Larry Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- IW-2	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	16.71
Depth to product	
Depth to water (DTW)	11.31

Sample Types (circle all applicable)	
<u>Monitoring Well</u>	
<u>Grab</u> /Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	14.0
Bubbles purged from flow cell?	(Y) N
Is drawdown >0.3 feet	(Y) N
Was passive sampling used?	Y / (N)
Flowrate =	mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	19.81	18.64	17.70				
Spec. Cond (µmhos)	+/- 3%	0.627	0.609	0.597				
D.O. (mg/L)	+/- 10%**	5.96	6.84	6.92				
pH	+/- 0.1	7.30	7.21	7.16				
ORP (mV)	+/- 10 mV**	165.4	173.4	175.4				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 15:00 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>151</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>18.36</u>
Depth to product	
Depth to water (DTW)	<u>13.12</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>15.0</u>
Bubbles purged from flow cell?	<u>(Y)</u> / N
Is drawdown > 0.3 feet	<u>(Y)</u> / N
Was passive sampling used?	Y / <u>(N)</u>
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
Performed	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>16.29</u>	<u>14.07</u>	<u>13.79</u>	<u>13.61</u>			
Spec. Cond (µmhos)	+/- 3%	<u>0.540</u>	<u>0.511</u>	<u>0.502</u>	<u>0.498</u>			
D.O. (mg/L)	+/- 10%**	<u>10.18</u>	<u>10.38</u>	<u>10.77</u>	<u>10.74</u>			
pH	+/- 0.1	<u>7.31</u>	<u>7.22</u>	<u>7.21</u>	<u>7.20</u>			
ORP (mV)	+/- 10 mV**	<u>137.9</u>	<u>130.1</u>	<u>125.4</u>	<u>122.7</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 15:25 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- 156	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	18.32
Depth to product	
Depth to water (DTW)	10.95

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	14.0
Bubbles purged from flow cell?	Y / N
Is drawdown > 0.3 feet	Y / N
Was passive sampling used?	Y / N
Flowrate =	mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	15.30	15.15	14.95				
Spec. Cond (µmhos)	+/- 3%	0.527	0.524	0.519				
D.O. (mg/L)	+/- 10%**	4.54	4.13	4.27				
pH	+/- 0.1	7.40	7.35	7.33				
ORP (mV)	+/- 10 mV**	127.4	128.1	128.3				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 15:50 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>147 AR</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>28.47</u>
Depth to product	
Depth to water (DTW)	<u>10.27</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>23.0</u>
Bubbles purged from flow cell?	<input checked="" type="radio"/> Y / N
Is drawdown > 0.3 feet	<input checked="" type="radio"/> Y / N
Was passive sampling used?	Y <input checked="" type="radio"/> N
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>17.38</u>	<u>16.49</u>	<u>16.09</u>	<u>15.94</u>			
Spec. Cond (µmhos)	+/- 3%	<u>2.151</u>	<u>2.279</u>	<u>2.298</u>	<u>2.306</u>			
D.O. (mg/L)	+/- 10%**	<u>2.86</u>	<u>2.69</u>	<u>2.35</u>	<u>1.87</u>			
pH	+/- 0.1	<u>7.06</u>	<u>6.98</u>	<u>6.94</u>	<u>6.93</u>			
ORP (mV)	+/- 10 mV**	<u>-68.2</u>	<u>-73.1</u>	<u>-75.6</u>	<u>-77.1</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 17:10 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid) Turbid Very Turbid

Well condition: Good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>132R</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>18.95</u>
Depth to product	
Depth to water (DTW)	<u>10.34</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>14.5</u>
Bubbles purged from flow cell?	<u>Y</u> /N
Is drawdown >0.3 feet	<u>Y</u> /N
Was passive sampling used?	<u>Y</u> /N
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>18.64</u>	<u>17.38</u>	<u>17.23</u>	<u>17.12</u>			
Spec. Cond (µmhos)	+/- 3%	<u>1.389</u>	<u>1.382</u>	<u>1.377</u>	<u>1.367</u>			
D.O. (mg/L)	+/- 10%**	<u>2.47</u>	<u>1.48</u>	<u>1.22</u>	<u>1.23</u>			
pH	+/- 0.1	<u>7.33</u>	<u>7.24</u>	<u>7.21</u>	<u>7.19</u>			
ORP (mV)	+/- 10 mV**	<u>130.2</u>	<u>132.9</u>	<u>133.7</u>	<u>134.0</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09

Sample Time: 16:45 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck

Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>133R</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>15.91</u>
Depth to product	
Depth to water (DTW)	<u>5.87</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>10.0</u>
Bubbles purged from flow cell?	<u>Y</u> /N
Is drawdown >0.3 feet	<u>Y</u> /N
Was passive sampling used?	Y/ <u>N</u>
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>17.86</u>	<u>17.23</u>	<u>16.87</u>	<u>16.74</u>			
Spec. Cond (µmhos)	+/- 3%	<u>0.792</u>	<u>0.778</u>	<u>0.774</u>	<u>0.776</u>			
D.O. (mg/L)	+/- 10%**	<u>3.27</u>	<u>2.70</u>	<u>2.43</u>	<u>2.37</u>			
pH	+/- 0.1	<u>7.32</u>	<u>7.27</u>	<u>7.23</u>	<u>7.20</u>			
ORP (mV)	+/- 10 mV**	<u>123.6</u>	<u>124.5</u>	<u>125.5</u>	<u>126.1</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/18/09 Sample Time: 16:25 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-18-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW-1675	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	21.77
Depth to product	
Depth to water (DTW)	17.13

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	19.0
Bubbles purged from flow cell?	Y / N
Is drawdown > 0.3 feet	Y / N
Was passive sampling used?	Y / N
Flowrate =	mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	16.51	16.30	16.17	16.06			
Spec. Cond (µmhos)	+/- 3%	0.852	0.860	0.879	0.890			
D.O. (mg/L)	+/- 10%**	10.20	9.82	8.78	8.45			
pH	+/- 0.1	6.93	6.89	6.86	6.84			
ORP (mV)	+/- 10 mV**	155.5	157.1	157.7	158.4			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 9:20 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>167 D</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6) .
Stick up or stick down height	
Total depth of well (TD)	32.50
Depth to product	
Depth to water (DTW)	17.28

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate	(Duplicate ID: <u>Dup-01</u>)
MS/MSD	
Other	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	28.0
Bubbles purged from flow cell?	(X) / N
Is drawdown > 0.3 feet	(Y) / N
Was passive sampling used?	Y / (N)
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	17.32	17.05	16.95	16.99	17.04		
Spec. Cond (µmhos)	+/- 3%	0.726	0.717	0.714	0.714	0.713		
D.O. (mg/L)	+/- 10%**	4.81	3.58	3.12	3.01	3.08		
pH	+/- 0.1	7.08	7.01	7.00	7.00	7.01		
ORP (mV)	+/- 10 mV**	201.9	186.4	168.9	153.7	145.9		
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 9:00 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear) Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>1695</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>23.23</u>
Depth to product	
Depth to water (DTW)	<u>18.12</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>20.25</u>
Bubbles purged from flow cell?	<u>(Y)</u> /N
Is drawdown >0.3 feet	<u>(Y)</u> /N
Was passive sampling used?	Y/ <u>(N)</u>
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>17.62</u>	<u>16.49</u>	<u>15.94</u>	<u>15.67</u>			
Spec. Cond (µmhos)	+/- 3%	<u>0.834</u>	<u>0.818</u>	<u>0.812</u>	<u>0.810</u>			
D.O. (mg/L)	+/- 10%**	<u>2.39</u>	<u>3.43</u>	<u>3.86</u>	<u>4.10</u>			
pH	+/- 0.1	<u>6.93</u>	<u>6.89</u>	<u>6.86</u>	<u>6.85</u>			
ORP (mV)	+/- 10 mV**	<u>34.2</u>	<u>40.4</u>	<u>42.0</u>	<u>40.9</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 10:40 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid) but lots of organic material

Well condition: good - cap off

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- 169D	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	34.70
Depth to product	
Depth to water (DTW)	18.15

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	29.0
Bubbles purged from flow cell?	(Y) N
Is drawdown > 0.3 feet	(Y) N
Was passive sampling used?	Y (N)
Flowrate =	mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	15.74	15.65	15.30	15.21	15.13	15.06	
Spec. Cond (µmhos)	+/- 3%	0.061	0.086	0.522	0.677	0.742	0.749	
D.O. (mg/L)	+/- 10%**	10.76	18.42	20.48	12.04	9.28	7.33	
pH	+/- 0.1	7.94	7.54	6.99	6.89	6.86	6.84	
ORP (mV)	+/- 10 mV**	99.1	54.1	-46.4	-60.9	-63.6	-65.2	
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 10:20 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: Clear/Slightly Turbid/Turbid/Very Turbid

Well condition: no cover & cap was knocked off

Signature: Kathy Sak Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>152</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>18.38</u>
Depth to product	
Depth to water (DTW)	<u>12.68</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>15.0</u>
Bubbles purged from flow cell?	(Y) / N
Is drawdown > 0.3 feet	(Y) / N
Was passive sampling used?	Y / (N)
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>18.60</u>	<u>17.59</u>	<u>17.08</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.542</u>	<u>0.520</u>	<u>0.511</u>				
D.O. (mg/L)	+/- 10%**	<u>5.81</u>	<u>4.71</u>	<u>4.27</u>				
pH	+/- 0.1	<u>7.33</u>	<u>7.22</u>	<u>7.18</u>				
ORP (mV)	+/- 10 mV**	<u>86.1</u>	<u>88.5</u>	<u>90.8</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6 / 19 / 09 Sample Time: 11 : 25 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear Slightly Turbid Turbid Very Turbid)

Well condition: good but PVC is cut too high - if cap on the cover won't go on

Signature: Kathy Eck

Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>150</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>18.27</u>
Depth to product	
Depth to water (DTW)	<u>11.65</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>13.25</u>
Bubbles purged from flow cell?	(Y) / N
Is drawdown > 0.3 feet	(Y) / N
Was passive sampling used?	Y (N)
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>16.61</u>	<u>16.01</u>	<u>15.63</u>				
Spec. Cond (µmhos)	+/- 3%	<u>0.752</u>	<u>0.740</u>	<u>0.734</u>				
D.O. (mg/L)	+/- 10%**	<u>1.33</u>	<u>1.11</u>	<u>1.26</u>				
pH	+/- 0.1	<u>7.04</u>	<u>6.99</u>	<u>6.95</u>				
ORP (mV)	+/- 10 mV**	<u>108.1</u>	<u>110.3</u>	<u>112.5</u>				
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09 Sample Time: 11:50 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: good

Signature: Kathy Eck Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW- <u>148 R</u>	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	<u>24.36</u>
Depth to product	
Depth to water (DTW)	<u>10.33</u>

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: _____)	
MS/MSD	
Other _____	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method (B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	<u>19.0</u>
Bubbles purged from flow cell?	<u>(Y)</u> / N
Is drawdown >0.3 feet	<u>(Y)</u> / N
Was passive sampling used?	Y / <u>(N)</u>
Flowrate =	mL/min
ID number from controller console	# <u>165</u>

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
<u>Performed</u>	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	<u>16.50</u>	<u>15.73</u>	<u>15.57</u>	<u>15.49</u>			
Spec. Cond (µmhos)	+/- 3%	<u>0.976</u>	<u>0.969</u>	<u>0.967</u>	<u>0.964</u>			
D.O. (mg/L)	+/- 10%**	<u>7.57</u>	<u>7.01</u>	<u>6.85</u>	<u>6.82</u>			
pH	+/- 0.1	<u>7.22</u>	<u>7.16</u>	<u>7.12</u>	<u>7.11</u>			
ORP (mV)	+/- 10 mV**	<u>83.7</u>	<u>86.4</u>	<u>87.5</u>	<u>88.6</u>			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6 / 19 / 09

Sample Time: 11 : 10 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other: _____

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES NO explain: _____

Appearance of Water: (Clear/Slightly Turbid/Turbid/Very Turbid)

Well condition: Good

Signature: Kathy Eck

Date: 6-19-09

KERAMIDA ENVIRONMENTAL, INC.
GROUNDWATER SAMPLE INFORMATION SHEET

Facility Name: GP – Former Allison Plant 10	KEI Project #: 2829E-001/003
Sample I.D.: MW-10-1R	Well Location:

Monitoring Well Data	
Well Material	(PVC/SS/Teflon)
Inside Diameter, in.	(1 2 4 6)
Stick up or stick down height	
Total depth of well (TD)	18.49
Depth to product	
Depth to water (DTW)	13.22

Sample Types (circle all applicable)	
Monitoring Well	
Grab/Composite	
Split Sample	
Duplicate (Duplicate ID: Dup-03)	
MS/MSD	
Other	

Conventional sampling	
Height of water column (H = TD – DTW)	
Conversion value (CV)*	x
1 Well volume = H x CV	= gal
3 Well volumes =	= gal
Purge method	
(B = bailer, P = pump)	B / P

⇐OR⇒

Micropurge sampling	
Depth of pump placement (place mid-screen)	15.0
Bubbles purged from flow cell?	<input checked="" type="radio"/> Y / <input type="radio"/> N
Is drawdown >0.3 feet	<input checked="" type="radio"/> Y / <input type="radio"/> N
Was passive sampling used?	<input type="radio"/> Y / <input checked="" type="radio"/> N
Flowrate =	mL/min
ID number from controller console	# 165

*Conversion values (gal/ft): 0.75" dia = 0.023, 1" dia = 0.04, 2" dia = 0.16, 4" dia = 0.65, 6" dia = 1.47

Field Test(s)	Stability	Result	Result	Result	Result	Result	Result	Result
Performed	Range	(3 min)	(6 min)	(9 min)	(12 min)	(15 min)	(18 min)	(21 min)
Temperature (°C)	+/- 3%	15.87	16.21	15.85	15.86			
Spec. Cond (µmhos)	+/- 3%	0.586	0.578	0.579	0.579			
D.O. (mg/L)	+/- 10%**	9.35	8.80	8.56	8.30			
pH	+/- 0.1	7.07	7.00	6.97	6.95			
ORP (mV)	+/- 10 mV**	159.3	161.5	163.0	163.8			
Turbidity (NTU)	+/- 10%**							
H ₂ S (mg/L)								
Fe ²⁺ (mg/L)								

Check stability after three readings and every reading thereafter until achieved.

**Only one of these parameters must reach stability.

Observations:

Volume of water purged from well: 0.5 gallons

Sample Date: 6/19/09

Sample Time: 14:45 (military time)

Was metals sample filtered prior to preservation? YES NO method: 0.45 µm cartridge / other:

Color of water before filtration: NA After filtration: NA

Reaction upon addition of preservatives? YES (NO) explain:

Appearance of Water: Clear/Slightly Turbid/Turbid/Very Turbid

Well condition: good

Signature: Kathy Eak

Date: 6-19-09